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## Markov-Perfect Industry Dynamics: Theory, Computation, and Applications

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Nan Yang

This dissertation presents models of Markov-perfect industry dynamics, as well as their applications to the analysis of entry, exit, and competitive conduct in oligopoly markets. In this dissertation, the author devotes special attentions to the Markov-perfect equilibrium's uniqueness and computation. Fast and accurate algorithms are developed to compute and estimate the proposed models, which ensure the reliability of the empirical analysis and policy experiments.

Nan Yang (born in Hefei, China in 1982) obtained his B.A. in Economics and B.Sc. in Mathematics and Applied Mathematics from Peking University in 2005, before he enrolled in Tinbergen Institute's M.Phil. programme in the same year. After graduated from the M.Phil. programme in 2007, he went on to pursue Ph.D. in Economics at VU University Amsterdam. He completed a large part of his Ph.D. dissertation when he was hosted as a visiting student at Tilburg University from 2008 to 2012. After defending his thesis, he started as an Assistant Professor at the Business School of National University of Singapore, jointly appointed at the Department of Strategy & Policy and the Department of Marketing.

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